

RESPONSE LETTER

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REVIEWER 00227360

The authors listed a number of specific and non specific signs of pancreatic injury. Then, one question may be raised for what signs can be used as criteria for choosing the surgical management for pancreatic injury? In specific CT signs of pancreatic injury, the focal or diffuse pancreatic enlargement/edema may also be seen in acute pancreatitis. Then, how do you differentiate the sign between injury and acute pancreatitis?.

R: Thank you for your kind observation. Specific and non specific signs of pancreatic injury have been described in the paper. Of course the focal or diffuse pancreatic enlargement / edema may also be seen in acute pancreatitis, however the patient history and the traumatic event can lead to a correct diagnosis by considering this sign as a specific sign of pancreatic trauma. As reported in the discussion, a grading system combining the different CT signs has been proposed and Grade III (transections or major lacerations with duct disruption in distal pancreas), Grade IV (transections of proximal pancreas or major lacerations with associated injury to the ampulla of Vater), Grade V) massive disruption of the pancreatic head) require a surgical treatment. The most important prognostic factor is the destruction of the pancreatic duct which requires surgical or endoscopic treatment while the lesions which do not involve pancreatic duct can be treated by conservative treatment. The rupture of the pancreatic duct is reported to be poorly detectable with CT, even if parenchymal laceration affecting more than 50% of the thickness of the gland are associated with high risk of pancreatic duct damage.

REVIEWER 00058446

This a very interesting retrospective study about the role of CT for diagnosis of pancreatic trauma, and as we know, pancreatic trauma is associated with high morbidity and mortality especially in case of delayed diagnosis. According to the result of this study, CT represents an accurate imaging tool for recognizing direct and indirect signs of pancreatic trauma, and provides useful information to plan therapeutic approach. 1.Only 8 out of 136 (6%) patients underwent surgical treatment and the pancreatic injuries were confirmed in all cases, how about the other 128 patients treatment and result? 2.Among the specific signs, the presence of fluid between the splenic vein and the pancreas represents the most common CT finding , which is the most important sign of pancreatic injury for suggesting surgical indication?

R: Thank you for your suggestions and considerations. The other 128 patients underwent conservative treatment and follow-up CT examination confirmed the resolution of the pathological findings. The manuscript has been accordingly changed in order to better clarify this data.

The fluid between the splenic vein and the pancreas represents a specific CT sign of pancreatic trauma but not an absolute indication for surgical treatment. As reported in the discussion, the most important prognostic factor is the destruction of the pancreatic duct which requires surgical or endoscopic treatment while the lesions which do not involve pancreatic duct can be treated by conservative treatment.

REVIEWER 00004485

The authors retrospectively review CT findings in 136 patients with presumptive pancreatic trauma; 94% (128/136) patients who had nonoperative treatment had CT abnormalities and 6/8 (75%) of individuals undergoing surgery for this trauma were correctly diagnosed as having a transection with CT scan. 1. Can the authors confirm that none of the 128 patients treated nonoperatively, in fact, did not have a major duct leak/transection? Did none of these patients have an ERCP? 2. You quote a mortality between 10-30% in pancreatic trauma and a 30% morbidity. Do you have any outcomes on the morbidity/mortality in the patients in the current series? 3. Please define the timing of surgery in the 8 patients who underwent operation. 4. The 2012 revised Atlanta classification of pancreatitis reinforces that pseudocysts cannot be defined before 4-6 weeks. Please modify the “assessed signs” accordingly. 5. Can you define the timing between the abdominal imaging and the abdominal trauma? If not, please describe this as a limitation of the current series. 6. The manuscript would be improved by showing examples of the multiple other CT abnormalities that can be seen with pancreatic trauma. 7. Please correct the references. Limit author number (see reference 10). Omit the month of publication (8, 9, 13, 15, 18, 19, 20).

R: Thank you for your observations.

1. The 128 patients treated nonoperatively underwent follow-up CT examination and a complete resolution of the CT pathological findings was observed in all cases. None of these patients underwent ERCP but the resolution can indicate the absence of the major duct transaction. This topic has been reported among the main limitations of our study and the text has been accordingly changed in order to better clarify this data.
2. We reported mortality and morbidity rates from the medical literature; in our series we do not have any outcomes on the morbidity or mortality. This topic has been added among the limitations of our paper.
3. Thank you for your suggestion. The timing has been reported in the manuscript.
4. The requested change has been performed.
5. Thank you for your observation. We reviewed all clinical data and the mean time between abdominal trauma and imaging has been reported in the manuscript.
6. Other CT abnormalities have been reported.
7. The references have been changed according to the requested indications.

REVIEWER 02664504

Minor corrections required. Role of MRCP for Pnacreatic Ductal injuries need to be mentioned.

R: Thank you for your kind observation. The role of MRCP for pancreatic duct injuries has been mentioned in the discussion.